

PDA/wireless email system

RIM BlackBerry 5820

Email works fine in the office, but getting access when you're out and about isn't always the easiest operation. If you've got a notebook or PDA (personal digital assistant) then you can dial in and pick up your mail, but there's still the hassle of finding a telephone point or juggling a mobile phone. All in all, it can end up being more trouble than it's worth.

Keeping in contact

The BlackBerry from RIM aims to put an end to these complications, giving you constant access to your corporate email address wherever you are. Similar in appearance to a Palm PDA (although with a keyboard, not a touch-screen) the device connects to your company email system over GPRS (general packet radio service), keeping you constantly updated.

Keeping things secure inside your company building is relatively easy, but once you introduce remote access things can get trickier. The BlackBerry server software allays system administrators' fears by encrypting all email before it is sent to the device, so even if it's intercepted it can't be read.

The requirement for the BlackBerry Enterprise Server software installation makes this very much a corporate, rather than consumer, solution, as does the price. Costs will vary depending on how many clients you want to support, but the server software will set you back somewhere in the region of £2,500. Add to this a handset

cost of around £400 and a £40-a-month GPRS bill and it quickly becomes a business-only option.

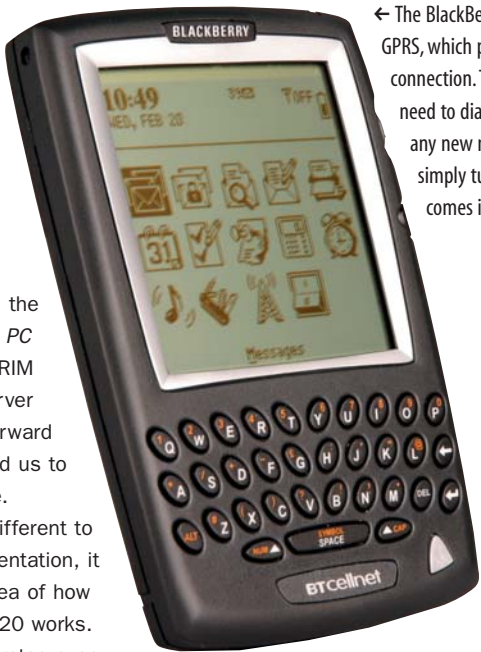
Testing times

Rather than install the server software in PC Advisor's offices, RIM set up a demo server where we could forward mail, which allowed us to try out the service. Although slightly different to the actual implementation, it gave us a good idea of how the BlackBerry 5820 works.

The device operates over GPRS, so the data connection is always-on. You don't have to send and receive mail – it just automatically turns up on the device when it comes through, making it a very neat setup. You navigate the device using a jog dial at the side, while situated below is an escape button, used to cancel any operation.

A small keyboard occupies the bottom third of the device, with the rest given over to the display. As it's not touch-sensitive, the screen is very clear and readable even in low-light conditions – although there a backlight is available if things are too dark. The keyboard is surprisingly usable despite its small size. Okay, you won't achieve 40 words a minute on the BlackBerry, but it's good enough for composing emails on the move. Also supplied is a desktop cradle, allowing you to sync your device when you get back to the office or back up your data.

The BlackBerry 5820 offers standard PDA functions, such as calendar and contacts, plus a calculator and alarm. Although the device can only currently perform email tasks, updates are planned for an integrated web browser. It is also voice-capable, with an additional headset – although this is dependent on what the



← The BlackBerry 5820 operates over GPRS, which provides an always-on connection. This means there's no need to dial in to check if you have any new messages – new mail simply turns up as and when it comes in

service operator decides to offer. Currently it's available through BT Cellnet, but there are apparently talks with other networks.

At the moment, you can only use the BlackBerry 5820 in the UK, which is a shame as it certainly beats lugging a laptop with you when you go abroad. Roaming agreements with foreign operators are being negotiated, so you should be able to use it abroad soon.

BlackBerry devices are available in the US, although software developed for those models won't run on this one. The 5820 is also Java-based, so applications need to be rewritten to work on the platform. A Java Development so you can write your own applications has been promised, although it's not currently available.

Verdict

The BlackBerry does work incredibly well – and certainly beats carrying around a notebook or juggling a PDA and mobile phone just to get at your email. The pricing makes it a business-only product, but if you need access to email while away from the office it's cheaper than kitting everyone out with a notebook. Of course, the down side is you can't claim you never got that email... ■

Will Head

Digital video camcorder

EXCLUSIVE JVC GR-DV3000



With a features list as long as the end credits to *Lord of the Rings*, it's clear JVC has thrown everything but the kitchen sink into its latest camcorder, the GR-DV3000. It has tried to cater not just for video enthusiasts, but also for those who work with multimedia on the web, by incorporating email and webcam facilities. With this in mind, we were keen to test whether the GR-DV3000 is a genuine all-rounder or just a jack-of-all-trades.

Smile! You're on camera

The camcorder itself has a long body with a large f/1.2 aspherical lens, yet it's also compact and light. The design is beautifully ergonomic, with zoom and record buttons that are easy to reach and operate. JVC has also included a 3.5in LCD (liquid crystal display) fold-out monitor that shows a large, bright image.

The 1.33Mp (megapixel) progressive scan CCD (charge-coupled device) image processor can capture sharp, detailed stills, although image quality is still behind that of most entry-level digital-still cameras. However, video quality is outstanding and pictures are clear and crisp, with fine detail and vivid colours.

The claimed horizontal resolution of 540 lines is an improvement over the 520 lines offered by its predecessor the GR-DV2000, and this hike in resolution seems to have paid dividends in picture quality. The vertical resolution of 576 lines

→ The JVC GR-DV3000 is excellent value for money, packing in plenty of useful features while offering top-notch video and sharp images

is also the theoretical limit for the PAL video format. The 10x optical zoom performs very well, and we only started to notice small amounts of grain in the picture at around 9x magnification.

The auto-exposure copes well with changes in light and it only overcompensates where there are sharp contrasts in light levels. Colours are slightly drained in low light, but the night shooting option goes some way to overcoming this.

Helpfully, the GR-DV3000 has a manual focus that allows you to adjust the focusing to your requirements. However, there's no manual white balance option to adjust the mix of primary colours in the white part of the picture.

The bi-directional DV (digital video) connection allows you to transfer your footage to your PC for editing and then record your final cut to a MiniDV tape. This also features a digital image stabiliser for cleaning up shaky camera work, rather than the inferior electronic type seen in many entry-level camcorders.

You've been framed

JVC has thrown in a healthy array of digital effects that you select from the control panel on the inside of the fold-out LCD and apply during playback. You can choose from sepia, strobe and twilight as well as effects that simulate a backlight and spotlight.

If you shoot with a tripod, you'll be disappointed to find that the GR-DV3000 has a bottom-loading tape mechanism. This means you'll have to unscrew the camcorder from the tripod head every time you have to change a cassette. However, it does have an articulated viewfinder if you don't like using the LCD to frame your shots.



The USB connection allows the GR-DV3000 to function as a webcam for video-conferencing. However, you'll need to buy the third-party software for this separately. It also offers the option of shooting video in Mpeg-4 format so that they are ready for emailing.

The JVC's software bundle includes Digital Photo Navigator for transferring digital stills and Pixela ImageMixer, a simple editing and effects package, both of which are perfect for beginners. The MMC (multimedia card) slot on the righthand side of the camera allows you to store stills separately from your video. However, you might want to upgrade the supplied 8MB card to a higher capacity version.

Verdict

The GR-DV3000's price tag of £1,200 might be expensive for some buyers, but it's good value considering how many features JVC has managed to pack in to this compact unit. With a comprehensive array of features aimed at video-editing and web enthusiasts, the GR-DV3000 offers excellent value for money. Image quality was superb, with a decent zoom and plenty of menu options. Overall, JVC strikes a good balance by offering a range of features without cutting corners on performance. ■

Paul Rincon

RIM BlackBerry 5820

Specifications: 8MB flash memory; 1MB SRAM; 32bit processor; embedded wireless modem; backlight; jog dial; 13-20 line display (dependent on font size); vibrate alert; email; contacts; calendar; internal lithium-ion rechargeable battery; GPRS; docking cradle; 117x79x18mm; 139g.

BlackBerry: 01784 477 465

Website: www.blackberry.net/uk

Price: £2,500 for software, £400 per device, £40 per month (approximate)

0	1	2	3	4	5	6	7	8	9	10
Build quality										9
Features										7
Value for money										7

JVC GR-DV3000

Specifications: 1/36in CCD; f1.2 aspherical lens; 10x optical zoom; 540 lines horizontal resolution/576 lines vertical resolution; USB/DV (input/output); 1.33Mp still mode (1,280x960 pixels native); 3.5in LCD; 660g; 76x90x194mm.

JVC: 0870 330 5000

Website: www.jvc.co.uk

Price: £1,200 ex VAT

0	1	2	3	4	5	6	7	8	9	10
Build quality										8
Features										9
Value for money										7

Professional digital camera
Olympus Camedia C-40 Zoom

PC ADVISOR **TOP 10**
The Camedia C-40 Zoom's main claims to fame are its size and weight. Admittedly you can pick up a smaller entry-level camera but, at just 190g and measuring 87x69x43mm, the Olympus is the most compact device we've seen in the professional category.

Don't be fooled into thinking that just because the Camedia is small it isn't a

quality camera – the CCD (charge-coupled device) offers a respectable 3.95Mp (megapixels) and the image quality is impressive. Furthermore, unlike beginner's point-and-click cameras, you're given lots of control with manual, shutter speed and aperture priority automatic modes in addition to programmed automatic. The Camedia's price is very attractive, too – at £511, this is the one of the cheapest top-end models we've reviewed.

Needless to say, there have to be some drop-offs. After all, it's unrealistic to expect everything in such a compact and reasonably priced camera. The first area in which the Camedia C-40 Zoom doesn't compete with more expensive cameras is the lens. Despite a headline zoom figure of 7x, the true optical zoom is just 2.8x. Equally,



the aperture is a quite modest f/2.8, falling to f/4.8 at the telephoto setting.

The second major concession is the Camedia's battery. In place of the more common rechargeable, this camera is supplied with a primary lithium-ion battery. Finally, there are no bundled third-party applications. In virtually all other respects, though, this has everything you'd expect of a serious digital camera.

Verdict

The Olympus is small enough to carry around with you all day long yet is able to take superb quality photographs at a modest price. Clearly a camera this size and price isn't going to offer everything you'd get with a bulkier model costing 50 percent more, but the compromises it makes aren't as significant or numerous as you might expect. ■

David Bedford

Photo printer
Canon S900

The S900 is part of Canon's revamped printer line-up (see the S200 on page 64 and the S300 in the Personal printers chart on page 126), and is designed specifically for photo reproduction. If you want the best photo prints, then you're going to have to sacrifice in other areas – like speed and print costs – but the S900 is no different to competitors in this way.

The Canon S900's text and graphics output aren't bad – just not that speedy. Printing a 10-page monochrome document in draft mode worked out at 4.4ppm (pages per minute), just under Canon's claimed 5.7ppm. A five-page colour PowerPoint presentation gave a 1.4ppm print speed, significantly lower than the claimed 4.2ppm.

When it comes to photo printing, your patience is rewarded. The S900 is a six-colour printer, which breaks down into black, cyan, magenta, yellow, photo cyan and photo magenta. The system uses separate ink tanks, so there's no need to throw away ink you haven't used – simply replace the colour that's exhausted.

The Canon's software is user friendly and takes you through the necessary steps



to install your printer. On first use you need to align the heads, but that's simply a matter of printing out a test sheet and adjusting the values in the software. Photo reproduction on normal paper was good but lacked detail, especially in dark areas. Switch to photo paper, though, and the results are much better. The S900 can also do edge-to-edge printing, so there's no white border.

Verdict

The S900 is expensive, both in purchase price and ink, and a full set of cartridges will set you back nearly £54. However, if you want realistic photo output you won't be disappointed. The Canon isn't an all-round top performer, but what it does do it does really well. ■

Will Head

Subnotebook
Compaq Evo N200

Compaq's Evo follows the current trend in corporate notebooks of adopting a stylish design, so it seems that PC manufacturers are finally realising that looks are important to customers. And, even among a growing crowd of svelte and chic subnotebooks, the N200 looks good. It is just over 2cm thick, with a tiny footprint thanks to the 10.4in screen. Its diminutive

frame is finished in sleek metallic black and silver.

The Evo is not just a pretty executive toy, though, with this fully featured notebook weighing in at 1.13kg. To pare down the pounds to this weight point you do have to lose something. In this case it's the removable storage drives – the N200 comes with just a 20GB hard drive. However, at extra cost you can add on a MEU (mobile expansion unit). Our review unit came with the £253 MEU, which adds an eight-speed DVD-ROM drive, as well as speakers and parallel, serial, VGA, two PS/2 and two USB ports.

The Compaq is powered by a 700MHz Mobile Pentium III, 192MB of RAM and a 4MB ATI Mobility L graphics card – all this

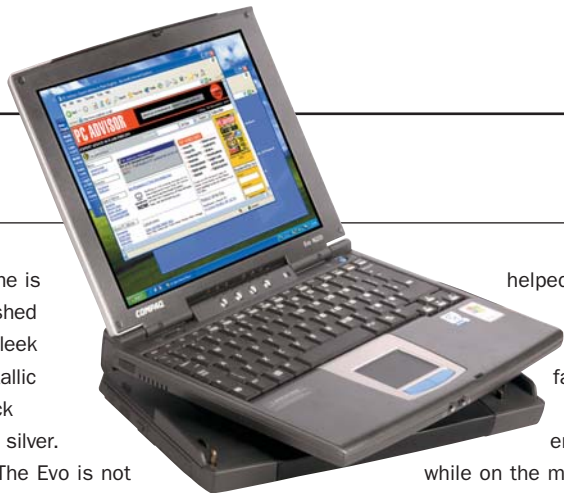
helped it to pull in a WorldBench 4 score of 67. This may not be the fastest performance score, but the Evo is powerful enough to carry out tasks while on the move. Equally, the choice of a less powerful processor means that Compaq has kept the price reasonable.

Software is minimal on the Evo with just a few bundled utilities, and the warranty only lasts a year, but it does cover you worldwide which is a benefit for frequent business travellers.

Verdict

The N200 is a gorgeous-looking notebook that offers all the power you will need on the road. The option of an MEU lets you have ultra portability on the move, with the choice of a wide range of features when you are at your desk. ■

Ursula Tolaini



Mobile phone and internet access device
Pogo

The Pogo is a multipurpose mobile phone that is GPRS- (general packet radio service) ready. It combines email and text messaging, rapid web access, a networked contacts list and diary, MP3 playback and games. Measuring 150x24mm and weighing 243g, the Pogo is large, but this means it offers a spacious touch-sensitive TFT (thin-film transistor) screen. You dial with your finger or the stylus and talk with

an earpiece and microphone or the included stereo headset/mic, which is also used for MP3 playback. Email and text messages are sent via the onscreen keyboard.

The Pogo uses an HTML 3.2 web browser, with JavaScript 1.1, Flash 4.0, Jpeg, GIF and secure 128bit SSL connections, enabling safe web-based purchasing. High-speed access is provided via a Pogo-Tech proxy server. HTML code is scanned and redundant information is extracted before the page transmitted to the Pogo display. Images are sent half-size and processed using a colour scanning algorithm, so only new colours are sent. Progressive rendering makes web access even faster as text and links are displayed as received, without waiting for graphics.

The contact list and diary data is stored locally and backed up on a server, while MP3 files are stored on an MMC (multimedia card) – a 16MB version is bundled with the package. Some

games are built in, while others will be available through the Pogouser.com website.

Verdict

The Pogo is unmatched for portable internet access, email and text messaging. In addition, your all-important contact and diary info is automatically backed up on a server. This is where the Pogo falls down – the monthly £7.95 subscription fee for use of the proxy server and data backup seems excessive. ■

Andrew Doran



Pogo

Specifications: 75MHz ARM processor; 4MB flash memory; 16MB of SDRAM; 320x240 touch-sensitive 256-colour TFT screen.

Carphone Warehouse: 0808 100 9250
Website: www.carphonewarehouse.com/pogo
Price: £281 ex VAT, £7.95 a month for internet access

0	1	2	3	4	5	6	7	8	9	10
Build quality										8
Features										9
Value for money										7

Canon S900

Specifications: 2,400x1,200dpi; 6 colours; max A4 size; borderless printing; 100-sheet input; USB interface; 270 pages at 5 percent coverage; £8.99 cartridge; Windows 98/Me/2000/XP support; 443x319x185mm; 5.8kg.

Canon: 0800 616 417
Website: www.canon.co.uk
Price: £280 ex VAT

0	1	2	3	4	5	6	7	8	9	10
Build quality										8
Features										7
Value for money										6

Budget notebook
HP Pavilion zt 1121s

The HP Pavilion zt 1121s is targeted at the home and student market, and is the first in a range of ‘designed from the ground up’ novice notebooks. In the past HP has relied on rebadging its OmniBook range of business portables to pull in the high street punters, but now it is taking a different approach in an attempt to win a bigger share of this expanding market.

HP Pavilion zt 1121s

TOP 10

Specifications: 1.06GHz Mobile Celeron; 128MB RAM; 20GB hard disk; 8x DVD-ROM; 14.1in TFT screen; 2.6kg; 318x273x36mm; Windows XP Home; 1-year RTB warranty.

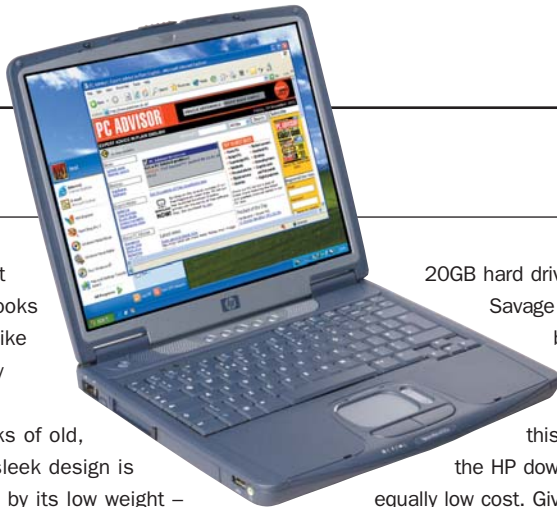
HP: 0870 241 3625
Website: www.hp.co.uk
Price: £850 ex VAT

0	1	2	3	4	5	6	7	8	9	10
Build quality										9
Features										7
Value for money										8

The zt 1121s looks nothing like the bulky Pavilion notebooks of old, and its sleek design is reflected by its low weight – just 2.6kg. You can even get the weight down to 2.4kg by swapping the eight-speed DVD-ROM for a weight-saving option, although we question how useful this is. There is also no floppy drive, though it does come with a voucher offering you a discount on an external USB unit.

The HP has an attractive dark grey and silver finish and, to make it even funkier, it has purple lights around the touchpad. The keyboard is comfortable to use and feels sturdy – something which is not always the case with budget notebooks.

Performance from the 1.06GHz Mobile Celeron chip twinned with 128MB of RAM,



20GB hard drive and onboard S3 Savage graphics was not the best – it managed a WorldBench score of 68. But what keeps this low score from pulling the HP down the chart is its equally low cost. Given this budget price tag, the 1121s’ software bundle is generous – it comes with 25 titles, including Works Suite 2002, Money, Picture It and Encarta. The warranty is less generous, offering one-year return-to-base, parts and labour.

Verdict

The zt 1121s is a good choice if you are after a basic notebook from a reputable vendor; it has been designed and set up with care, which novices will appreciate. You can get more performance for your money, but not from a brand with such an established record for quality.

Ursula Tolaini

Colour inkjet printer
Canon S200

At PC Advisor we always place value for money high on the list of attributes by which we judge products. But when a device as cheap as Canon’s S200 comes along, we have to judge whether the manufacturer has sacrificed too many features in order to cut costs. Measuring just 390x189x162mm, this must rank as one of the smallest inkjet printers we’ve seen. So could its small

Canon S200

TOP 10

Specifications: USB interface; claimed print speed: 5ppm (mono), 3ppm (colour); 50 sheets A4 input; Windows 98/Me/2000/XP/Mac OS 8.6-9.x; 390x189x162mm; 2.4kg.

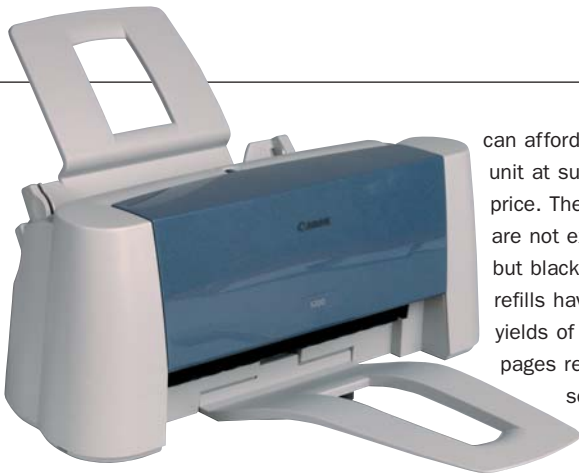
Canon: 0800 252 223
Website: www.canon.co.uk
Price: £54 ex VAT

0	1	2	3	4	5	6	7	8	9	10
Build quality										6
Features										5
Value for money										7

frame live up to our performance expectations?

In terms of the S200’s image quality, we were pleasantly surprised. The maximum resolution of 2,880x720dpi (dots per inch) is only reasonable, but that doesn’t stop it producing a vivid colour palette and clear text above draft resolution. However, the Canon suffers from a slow turn of speed. In our tests, the printer clocked up a dreadful time of 2.5ppm (pages per minute) in mono and an unimpressive 0.8ppm in colour.

We were also disappointed by the high running costs. A page of mono will set you back 3p, while a page of colour costs around 8p. This is probably how Canon



can afford to sell the unit at such a low price. The cartridges are not expensive, but black and colour refills have low page yields of 130 and 120 pages respectively, so you’ll have to replace them frequently which will prove frustrating and expensive.

Verdict

The S200 might look like a bargain, but beware the hidden cost of consumables. With page yields as low as these cartridges offer, you’ll pay a considerable price in the long run. Despite its decent image quality, the slow speeds define this as an inkjet for undemanding users.

Paul Rincon

Barebones system
MSI MS-6215T NetPC

Desktop computers have the advantage of being expandable, but the down side of this is that they tend to be bulky. With MSI’s MS-6215T barebones system, however, you can create a space-saving system without sacrificing expansion options. A barebones system is basically

MSI MS-6215T NetPC

Specifications: Barebones system; Socket 370 (Tualatin support); 815 chipset; onboard sound and graphics; TV-out (S-Video and composite); 10/100 ethernet, 2 FireWire, four USB, 2 PS2, 1 serial, 1 parallel, 2 PCI slots; 300x320x78mm.

3D Computer Systems: 01249 460 766
Website: www.msicomputer.com
Price: £160 ex VAT

0	1	2	3	4	5	6	7	8	9	10
Build quality										9
Features										9
Value for money										9

a motherboard and a case – you supply the other components to create a full PC. In the package you’ll also find a low profile heatsink and short EIDE and floppy cables, which are necessary because inside the box things are fairly cramped.

The NetPC’s motherboard uses Intel’s 815 chipset, so it supports a number of built-in components – an advantage in a small system. There’s onboard graphics as well as a TV-out port (S-Video and composite), although you can’t use both simultaneously. A total of four USB ports – two at the front, two at the back – are available, plus two FireWire, an integrated audio, 10/100 ethernet, infrared, keyboard, mouse, serial and parallel ports.

To keep the height down, the two PCI slots are mounted horizontally from a riser card and there’s room inside for a floppy drive, DVD-ROM and 3.5in hard drive.



All in all, the NetPC offers everything you could possibly want in a desktop computer, but squeezed into a compact box. Putting the system together can be fiddly – and you have to do everything in the right order – but the instructions are easy to follow. The motherboard supports Socket 370 Celeron and Pentium III processors, including the new Tualatin models. Testing the system with a 1.13GHz Pentium III processor and 256MB of RAM resulted in a WorldBench 4 score of 93.

Verdict

If you want to build a small format PC without sacrificing expandability, then the MS-6215T is a good buy. When you consider a good motherboard is around £100 and a case will set you back at least £50, £160 is a good deal.

Will Head

Webcam
Trust FamilyCam 310 AV

Trust describes its FamilyCam 310 AV as a digital camera, but it doesn’t look like one to us. With a maximum resolution of just 640x420 pixels, it won’t pose a threat to any of the models in our Digital cameras chart (page 124). For the purpose of this review, then, we’re treating the 310 AV as a webcam.

Like most webcams, Trust seems to have based its FamilyCam’s design on a camcorder rather than a stills camera.

Trust FamilyCam 310 AV

Specifications: max resolution 640x480 pixels; 128MB; 0.5kg; 2xAA batteries; USB connection; tripod; wriststrap.

Trust: 0800 328 0261
Website: www.trust.com
Price: £74 ex VAT

0	1	2	3	4	5	6	7	8	9	10
Build quality										5
Features										6
Value for money										7

With dimensions of 100x30x65mm, the 310 AV is tiny. However, you can store well over 200 stills and three minutes of video when it’s untethered from your PC. This is due to the FamilyCam’s impressive 16MB internal memory, although some buyers might prefer the options offered by a separate slot for an external memory card.

In terms of image quality, pictures are a bit dark and colours are muted. The webcam itself is also rather delicate, and doesn’t look as if it would cope well with a drop. We were also disappointed to find the 310 AV doesn’t have a flash.

However, Trust has thrown in a decent software bundle, including



Microsoft NetMeeting and Ulead PhotoExpress, and a miniature tripod. You can even use the FamilyCam as a dictaphone to record around 30 minutes of sound. It offers a comprehensive range of features for a low price of £74; you would usually have to pay over £100 for a webcam that can capture video on the move. Image quality could be better though.

Verdict

The FamilyCam is impressively compact and portable. It’s got plenty of useful features and an abundance of storage. However, the image quality lacks detail and the software doesn’t give you many options. Overall, though, the 310 AV will set you up with an impressive range of features for a reasonable price.

Paul Rincon

USB 2.0 cards

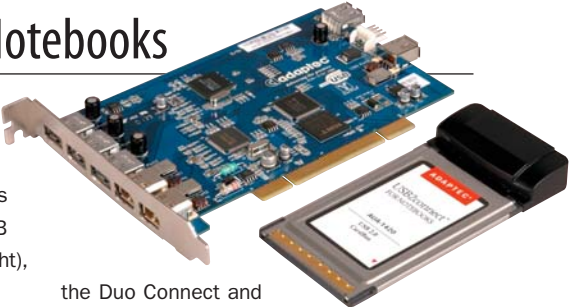
Adaptec Duo Connect and USB2 Connect for Notebooks

The introduction of USB wasn't a trouble-free affair, but ask most people if they'd go back to serial/parallel devices and the answer is usually no. The only down side is its snail-like speed, but with USB 2.0 this has all changed, as it ups the data rate from 12Mbps (megabits per second) to a maximum of 480Mbps.

Adaptec's Duo Connect (near right) is for those that like to sit on the fence, offering both FireWire and USB 2.0 in one single

card. With four USB 2.0 ports and three FireWire ones, the Duo Connect is ideal if you've already got FireWire devices but are looking to make the leap into USB 2.0. USB2 Connect for Notebooks (far right), on the other hand, is a Type II PC Card offering two USB 2.0 ports, allowing you to use USB 2.0 on the move.

Copying a single 495MB file from a 40-speed USB 2.0 CD drive to the hard drive took one minute 51 seconds with



the Duo Connect and two minutes five seconds with the USB2 Connect. Copying a mix of files adding up to 336MB took two minutes 30 seconds and three minutes nine seconds, respectively. Copying the same files over USB 1.1 took 10 minutes 29 seconds for the 495MB file and nine minutes 33 seconds for the mixed files.

Verdict

USB 2.0 shows a clear speed advantage over its previous incarnation and both products are reasonably priced. Duo Connect provides the flexibility of both USB 2.0 and FireWire while USB2 Connect is ideal for the mobile user.

Will Head

Adaptec Duo Connect

Specifications: PCI card; 4 USB 2.0 ports (1 internal); 3 FireWire ports (1 internal); USB 1.1 compatible; Windows 98/Me/2000/XP.

Adaptec: 01276 854 500

Website: www.adaptec.com

Price: £84 ex VAT

0	1	2	3	4	5	6	7	8	9	10
Build quality								8		
Features								8		
Value for money								8		

USB2 Connect for Notebooks

Specifications: Type II PC Card; 2 USB 2.0 ports; USB 1.1 compatible; Windows 98/Me/2000/XP.

Adaptec: 01276 854 500

Website: www.adaptec.com

Price: £65 ex VAT

0	1	2	3	4	5	6	7	8	9	10
Build quality								8		
Features								8		
Value for money								8		

Bluetooth adapters

Xircom Realport2 Bluetooth Adapter and 3Com USB Bluetooth Adapter

Bluetooth is one of those technologies that seems to be perennially emerging without ever really taking off, but the number of products is expanding. This month we've tested two innovative adapters that will help you take advantage of what Bluetooth has to offer.

First, the Xircom Realport2 Bluetooth Adapter. Its innovative design (a bit like a Type II PC Card at one end, and half a Type III PC Card cut vertically at the other)

means full size ports can be accommodated by the card without the need for adapter cables. Two cards together occupy the same space as one Type III card, so it's all very neat, once you get your head around it. Unfortunately, the design is let down by the software and the connection utility is temperamental.

3Com has also put thought into the design of its USB Bluetooth Adapter.

The device can either plug directly into the USB port, or you can use an extension cable to position it elsewhere for better reception. The aerial folds flat when not in use, making it compact for travelling. 3Com has updated its software suite since we last saw it, but it's still not the most intuitive to use.

Verdict

Both devices have an elegant design, it's just a shame that the software isn't quite up to the job yet. If this issue is resolved, though, then the future for these Bluetooth devices looks brighter.

Will Head

Xircom Realport2 Bluetooth Adapter

Specifications: PC Card Bluetooth adapter; internal aerial; connection manager software.

Xircom: 01793 403 000

Website: www.xircom.com

Price: £95 ex VAT

0	1	2	3	4	5	6	7	8	9	10
Build quality								8		
Features								7		
Value for money								6		

3Com USB Bluetooth Adapter

Specifications: USB Bluetooth adapter; fold-out aerial; connection manager software.

3Com: 01442 438 000

Website: www.3com.co.uk

Price: £89 ex VAT

0	1	2	3	4	5	6	7	8	9	10
Build quality								8		
Features								5		
Value for money								6		



Mobile phone

Motorola V60

Motorola's V series mobile phones have always been stylish, and the V60 follows this trend. Finished in brushed metal and with curves in all the right places, it has a high desirability factor.

Its beauty, however, is more than skin deep. The V60 is triband, so you can take it to America with you and there's also support for GPRS (general packet radio service) for faster data services. GPRS

may still be in its infancy in the UK, but it's set to increase in the future so it makes sense to have a compatible handset.

One area where Motorola has previously scored badly is usability, but the V60's interface has been revamped, making it easier to use. There are still a couple of niggles, however.

On previous clamshell models, it was impossible to see who was calling without opening the phone. The Motorola V60 alleviates this problem by positioning an additional LCD (liquid crystal display) screen on the outside, so the number is clearly visible. As far as we could tell, though, there was no way to reject a



call you didn't want to take without opening the phone, which makes the LCD a bit pointless.

The V60 supports data, although without any extra accessories you're limited to the internal WAP browser. There's also no Bluetooth or infrared, so if you want to hook it up to your PC it means splashing out on an extra cable. The external aerial is also a shame, spoiling the lines of an otherwise attractive design.

Verdict

This phone definitely looks the business, and the brushed metal finish is ultra-stylish. The V60's user interface has improved, too, in comparison to previous Motorola models, making it easier to use. But the lack of wireless connectivity is a shame, as is the external aerial and the inability to easily reject unwanted calls.

Will Head

Motorola V60

Specifications: 900/1,800/1,900MHz triband GSM; GPRS; predictive text; WAP; 500-name phonebook; standby 130 hours; talktime 200 minutes; lithium-ion; 109g; 45x85x24mm.

Motorola: 0800 015 1151

Website: www.motorola.co.uk

Price: £153 with contract ex VAT

0	1	2	3	4	5	6	7	8	9	10
Build quality								9		
Features								6		
Value for money								7		

Mobile phone

Siemens ME45

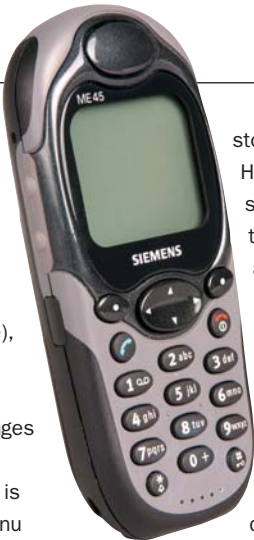
Siemens' ME45 is a jazzy compact phone that's certain to please style-conscious users. With its sleek curves, enigmatic black finish and mauve trim, it looks like the kind of phone Darth Vader might use.

The phone incorporates GPRS (general packet radio service), but you'll get limited benefit from this high-bandwidth service

now as few operators support it. However, it's a good stop gap until 3G (third-generation) services finally arrive. The Siemens ME45 also features EMS (enhanced messaging service), which allows you to send pictures and sounds to your friends as well as text messages and WAP 1.2.

The wide range of options is daunting, but the ME45's menu system is sensibly set out, making it a cinch to navigate. Our only gripe with the handset itself concerned the buttons, which are set close together and could cause you to dial wrong numbers.

There's a phonebook with room for 500 contacts, an organiser to help you meet your appointments and 38 ringtones plus space for four of your own. The phone includes a calculator, two games, a



stopwatch and currency converter. However, the battery life was somewhat limited. In our tests, the Siemens ME45 notched up an unimpressive 48 hours with medium usage.

At just under £80, this isn't the cheapest way to equip yourself with the latest mobile technology. But if price is no object – or if your operator offers a discount – you could do much worse than this functional, attractive handset.

Verdict

The ME45 is a touch on the expensive side, but it's got style to spare and is packed with plenty of useful features. The phone is GPRS-enabled, offering fast data services. However, we didn't get much talktime out of the lithium-ion battery.

Paul Rincon

Siemens ME45

Specifications: 900/1,800MHz dualband; 32x28mm display; 500-name phonebook; GPRS; predictive text; data cable; WAP 1.2; lithium-ion battery; calendar; clock; stopwatch; two games; 109x46x21mm; 99g.

Siemens: 01344 396 000

Website: www.my-siemens.com

Price: £80 ex VAT

0	1	2	3	4	5	6	7	8	9	10
Build quality								9		
Features								8		
Value for money								7		